

### AWARE – Washington / EMD Hazard Risk Assessment Executive Summary – February 2004

This summary provides a general assessment of the hazards that are believed to present the greatest risk at this time and for the next few months. It is intended to provide emergency managers, planners, officials, and the public advance notice of potential hazards enable them to initiate appropriate mitigation and preparation actions. Local consultations are always advised.

#### **Avalanches and Landslides:**

The wetter and milder than normal winter conditions have raised the risk of avalanches and landslides. These present very localized risks to winter sports / back country activities and transportation corridors. Short–term, even daily changes in local temperature and precipitation levels can rapidly create dangerous avalanche conditions. For geographically specific risk updates, consult local sources; and check frequently. Current forecasts are available at <a href="http://www.nwac.noaa.gov/#FORECASTS">http://www.nwac.noaa.gov/#FORECASTS</a>. Climatologic forecasts can be found at <a href="http://www.cpc.ncep.noaa.gov/products/predictions/90day/">http://www.nwac.noaa.gov/#FORECASTS</a>. Climatologic forecasts can be Northwest Weather and Avalanche Center at: <a href="http://www.nwac.noaa.gov/Wet\_snow.pdf">http://www.nwac.noaa.gov/products/predictions/90day/</a> and background on likely spring conditions is provided by the Northwest Weather and Avalanche Center at: <a href="http://www.nwac.noaa.gov/Wet\_snow.pdf">http://www.nwac.noaa.gov/Wet\_snow.pdf</a> Although on average avalanches claim relatively few lives per year, they have caused more deaths than any other natural hazard over the past one hundred years. These statistics include the Mount Saint Helens eruption; see the chart on the following page.

#### Flood:

The National Weather Service's Northwest River Forecast Center indicates increased flood risk in many areas of western Washington. Higher than normal risk of springtime flooding is anticipated because of the predicted higher winter precipitation levels, above normal current snow pack levels, and the saturated ground conditions. See river forecast data at: <a href="http://www.nwrfc.noaa.gov/">http://www.nwrfc.noaa.gov/</a>

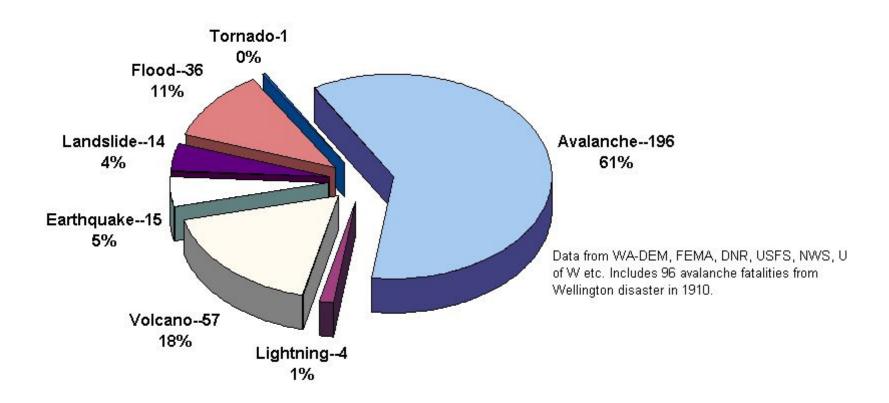
### **Terrorism:**

The Department of Homeland Security's has lowered the national threat level to YELLOW, or "Elevated." According to Governor Locke's statement on December 21st: "At this time, there is no specific threat in our state." No indications of increased risk since that date.

Compiled by: Analysis and Plans Section

## FATALITIES CAUSED BY NATURAL DISASTER IN WASHINGTON STATE

Compiled by Northwest Weather & Avalanche Center-June, 2001



# EMERGENCY MANAGEMENT DIVISION AWARE – Washington / HAZARD RISK ASSESSMENT FOR THE PERIOD February– April 2004

HAZARD	CURRENT PRIORITY	PROBABILITY / Frequency of OCCURRENCE	IMPACT POTENTIAL	ANALYSIS	REMARKS / SOURCE
AVALANCHE	1	HIGH ** (**National Standard Scale)		Specific storm parameters can greatly affect avalanche danger. Wet snow conditions increase the risk of spring avalanches. Transportation corridors remain vulnerable into March and April.	Local conditions vary greatly and change quickly; for the latest see: <a href="http://www.nwac.noaa.gov/#F">http://www.nwac.noaa.gov/#F</a> ORECASTS
LANDSLIDES	2	MEDIUM	LOW	USGS / NOAA predict wetter conditions this winter. These usually result from the increase build up of trapped underground water that increases the risk of landslides.	
FLOOD	3	MEDIUM	LOW	Saturated ground and continuing precipitation forecasts significantly increase the risk of more severe springtime flooding, especially in Western Washington. See: <a href="http://www.nwrfc.noaa.gov/">http://www.nwrfc.noaa.gov/</a>	
TERRORISM	4	LOW	HIGH	Government sources suggest a continuing likelihood that terrorists may attempt additional attacks on United States interests. No specific threats to Washington State are known at this time.	DHS Threat Advisory Level has been raised to YELLOW "Elevated". http://www.dhs.gov/dhspublic/
MAJOR EARTHQUAKE	5	LOW	HIGH	No significant changes to the normal pattern of small earthquakes. For current earthquake information <a href="http://www.ess.washington.edu/recenteqs/latest.htm">http://www.ess.washington.edu/recenteqs/latest.htm</a>	For additional information on earthquake hazards: http://www.geophys.washington.edu/SEIS/PNSN
SEVERE STORMS	6	LOW	MEDIUM	Historically, severe winter storms normally strike from early December through January, but can occur in February during years of climatic instability like Washington is currently experiencing.	Associated power outages and heating concerns http://www.pmel.noaa.gov/

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LOCAL HAZMAT SPILLS	7	MEDIUM	LOW	Because of their chemical, physical, or biological nature, hazardous materials can pose a potential risk to life, health, the environment, and property. Many small spills occur daily statewide with about 150 reported to EMD each month.	Quick response, containment, and cleanup are key to limiting the impact of these events. For appropriate regulatory information see:  http://www.ecy.wa.gov///pubs/96503/chapt6.htm
RADIOLOGICAL	8	LOW	HIGH	Public perception is a key element of safety, security, and protection of the economy.	
VOLCANO	9	LOW	HIGH	Scientists would normally expect some seismic warning prior to an eruption or a lahar.	Additional specific information: <a href="http://vulcan.wr.usgs.gov">http://vulcan.wr.usgs.gov</a>
TSUNAMI	10	LOW	HIGH	Large earthquakes and landslides can create tsunamis along our coast and in the Puget Sound region.	For additional information on Tsunami Awareness: <a href="http://www.pmel.noaa.gov/tsunami-hazard">http://www.pmel.noaa.gov/tsunami-hazard</a>
LARGE HAZMAT SPILLS and UMCD	11	LOW	HIGH	The Umatilla Chemical Depot is awaiting approval by Oregon Environmental Quality Committee to begin burning. Anticipate a lengthy process.	Permitting complications delay incineration of live agent until mid- 2004. http://www.csepp.net/
INFECTIOUS DISEASES, WILDFIRES, AND OTHER LOCAL HAZARDS	12	LOW	LOW	Seasonal risks from wildfire will increase further into 2004.	Specific hazards will be reprioritized as estimated risk levels rise.

Impact Potential

Rating People Costs \$

Low 0-5 Less than \$ 1 million

MEDIUM 6-20 Between \$ 1 and \$ 10 million

**HIGH** More than 20 Over \$ 10 million